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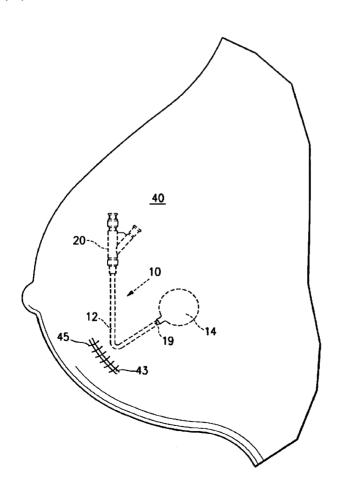
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[Continued on next page]

(54) Title: TEMPORARY CATHETER FOR BIOPSY SITE TISSUE FIXATION



(57) Abstract: Devices and methods are provided for temporarily maintaining access to a body cavity in a targeted tissue region within a patient's body. One embodiment of the catheter device includes an elongated shaft having a proximal shaft section which is flexible enough to be folded or coiled into a configuration for deployment within the patient. An alternate embodiment includes a catheter device having one or more detachable proximal shaft sections and having at least one one-way valve to restrict fluid flow of inflation fluid to flow to the balloon. After deployment of the catheter device completely within the patient, the opening through which the catheter device is deployed is closed, e.g. by sutures, adhesives and the like to minimize infection at the site. Within a few days or weeks after the tissue has been evaluated for cancer, the temporary catheter device may be removed from the patient. If cancer or pre-cancer cells are found in the specimen removed from the cavity, then a radiation balloon catheter or other irradiation device can be inserted into the patient to irradiate tissue surrounding the biopsy cavity to ensure that cancer cells within the tissue surrounding the cavity are killed.

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PCT/US2007/003877 A. CLASSIFICATION OF SUBJECT MATTER INV. A61M25/10 A61N5/10 ADD. A61B17/00 A61B17/22 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) A61M A61N A61B A61F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category' US 5 931 774 A (WILLIAMS JEFFERY A [US] ET 1-3,5,6X AL) 3 August 1999 (1999-08-03) page 1, line 27 - page 2, line 8 page 4, line 37 - page 5, line 60; claim 7-21 Α 1; figures 1,3 X WO 2004/043531 A (SENORX INC [US]) 7-11 27 May 2004 (2004-05-27) Α page 1, paragraph 1 1-7, 12,page 4, paragraph 8 page 6, paragraph 11 - page 6, paragraph 12 page 9, paragraph 27 page 11, paragraph 30 page 13, paragraph 36 claims 1,8-10; figures 1,2,5B,5D X Further documents are listed in the continuation of Box C. See patent family annex Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or document published prior to the international filing date but later than the priority date claimed \*&\* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 20/08/2007 6 August 2007 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

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